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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/717,479

11/21/2003

Noboru Koumura

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08/01/2006

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EXAMINER

PAHNG, JASON Y

ART UNIT

PAPER NUMBER

3725

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,479

Applicant(s)

KOUMURA ET AL.

Examiner

Jason Y. Pahng

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 30, 2005 has been entered.

Drawings

The amendment overcomes the drawing objections made in the last Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

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possession of the claimed invention. With regard to claim 1, separating metal materials from the plastic materials of the process cartridge while collecting particles in a first crushing step is not disclosed in the specification as originally filed. In page 10, the disclosure states that "process up to this point is the primary crushing step" in lines 3 and 4. It appears that there is no disclosure of separating metal materials from plastic materials in page 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lecturmy et al. (US 6,311,904) in view of Christiani et al. (US 2003/0183705), Prew et al. (US 5,257,740), and Aoki et al. (US 6,568,612).

With regard to claim 1, as well as can be understood, Lecturmy discloses a process for crushing cartridges of toner and inherently separating metal materials from plastic materials while toners are collected by suction. When the cartridge is crushed, metal materials is inherently separated from plastic. In a closely related art, Christiani teaches a process for recycling a plastic material of a package or cartridge [0001] wherein the process includes:

1. using a magnetic separator [0005]);

2. using an air separator (20); and
3. a spectroscopic separation process [0001];

Christiani's process improves separation of materials which can be recycled. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Lecturmy with a process for recycling his plastic cartridge as taught by Christiani, in order to improve separation of materials which can be recycled.

With regard to claim 1, the intended use of the process for a particular cartridge including metal, toner particles, and plastic materials of at least two different colors does not differentiate the claimed process from a combination of prior art processes satisfying the claimed process limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Claim 1 also calls for a nominal secondary crushing step. In a closely related art, Prew discloses a secondary crushing step (column 2, lines 15-23) in order to further adjust size of a material during a recycling process. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Lecturmy (as modified by Christiani) with a secondary crushing step in order to further adjust size of a material during a recycling process, as taught by Prew.

Claim 1 still further call for a nominal process to separate plastic material by color. Aoki discloses a process for separating plastic material by color (column 4, lines 52-59) in order to enhance the quality of recovered plastic. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Lecturmy (as modified by Christiani) with a process for separating plastic material by color in order to enhance the quality of recovered plastic, as taught by Aoki.

With regard to claim 2, Christiani's process includes a plastic material conveyed in a dried state in a spectroscopic separation process [0001].

With regard to claim 3, the intended use of the process for a particular plastic material with a reflection density not less than 1 does not differentiate the claimed process from a prior art process satisfying the claimed process limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Response to Arguments

Applicant's arguments filed November 30, 2005 have been fully considered but they are not persuasive. Applicant presents four arguments.

1) Applicant argues that the Lecturmy reference does not disclose a crushing step requiring metal materials be separated from plastic material. First, there is no disclosure in the originally filed specification describing a crushing step requiring metal materials be separated from plastic material. Second, Lecturmy reference inherently discloses a crushing step requiring metal materials be separated from plastic material because toner cartridges contain metal combined with plastic. When the cartridge is crushed, metal materials is inherently separated from plastic.

2) Applicant argues that the combined references does not disclose metal removal followed by collecting remaining toner particles in an air selection step. In the combined references, Lecturmy discloses collecting most of the toner particles. Then, the cartridge with most of the toner removed is processed according to Christiani. Christiani discloses metal removal [0005] followed by use of an air separator to collect

small and light materials. Christiani specifically discloses a recycling process for packaging waste comprising plastic materials of various polymer groupings including ferrous materials. An ordinary skill in the art would find it obvious to use Christiani's process to recycle nearly empty toner cartridge.

3) Applicant argues that the Christiani, Prew, and Aoki are not analogous to Lecturmy because Christiani, Prew, and Aoki do not disclose solving dust explosion problem. However, Applicant incorrectly interprets the field of claim 1. Claim 1 includes limitations non analogous to solving dust explosion problem. The scope of claim 1 goes far beyond steps closely related to solving dust explosion problem and includes steps unrelated to solving dust explosion problem. The correct field of claim 1 is recycling process including crushed or crushing plastic materials containing metals. The references Christiani, Prew, Aoki, and Lecturmy are closely related to the field covered by claim 1.

4) Applicant argues that the combination of Lecturmy, Christiani, Prew, and Aoki is not proper because the Office action has not explicitly pointed to any passage in the citations to Christian, Prew, and Aoki for the suggestion to modify Lecturmy. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958

F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation is implicitly found in the references as specifically disclosed in each of the claim rejections above and also found in the knowledge generally available to one of ordinary skill in the art.

Conclusion

This is a Request for Continued Examination of applicant's earlier Application No. 10/717,479. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the last Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

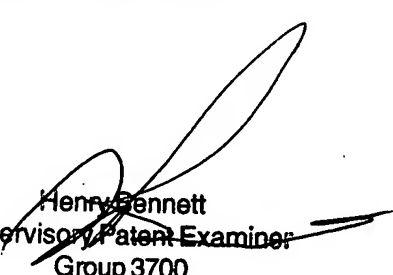
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y. Pahng whose telephone number is 571 272

4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571 272 4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JYP



Henry Bennett
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